IN THE CLAIMS

1. (original) A method for measuring a plurality of different organisms in a sample comprising:

(a) contacting said sample with an extraction reagent comprising nitrous acid, thereby forming an assay composition; and

(b) measuring, in said assay composition, markers of said plurality of organisms so as to measure said plurality of different organisms.

2. (original) The method of claim 1, wherein said plurality of organisms includes a first organism that is a gram positive bacterium, said extraction reagent extracts a first marker from said first organism and said measuring step comprises measuring said first marker.

3. (original) The method of claim 2, wherein said first organism is a *Streptococci* or *Enterococci* bacterium and said first marker is a cell wall-associated antigen.

4. (original) The method of claim 3, wherein said first organism is a Streptococci Group A, B, F or G bacterium and said first marker is a group specific antigen.

5. (original) The method of claim 2, wherein said plurality of different organisms includes a second organism selected from the group consisting of fungi, viruses and gram negative bacteria.

6. (original) The method of claim 2, wherein said plurality of different organism includes a second organism comprising a second marker, said measuring step comprises measuring said second marker and said second marker is a protein, nucleic acid and/or lipid marker.

7. (original) The method of claim 1, wherein said sample comprises mucus.

8. (original) The method of claims 1, wherein said sample is a nasal or pharyngeal sample or genital discharge sample.

9. (original) The method of claim 1, wherein said extraction reagent further comprises a surfactant.

10. (original) The method of claim 1, wherein said markers are measured in said assay composition using a multiplexed assay format.

11. (original) The method of claim 10, wherein said multiplexed assay format is a multiplexed immunoassay format.

12. (original) The method of claim 11, wherein said measuring step comprises contacting said assay composition with a patterned array of immobilized antibodies.

13. (original) The method of claim 1, further comprising neutralizing the pH of said assay composition.

14. (currently amended) The [[A]] method of claim 1, wherein said sample is ~~for measuring a plurality of different organisms in~~ an upper respiratory tract sample and: ~~comprising:~~
[[(a)]] (i) said contacting of said upper respiratory tract sample with [[an]] said extraction reagent ~~comprising nitrous acid, thereby forming an assay composition;~~
[[(b)]] ~~incubating said assay composition~~ is done under conditions suitable to extract a cell wall-associated antigen from a streptococcus bacterium; and
[[(b)]] (ii) said measuring, in said assay composition, markers of said plurality of organisms comprises measuring said antigen and one or more additional markers including a marker of at least one virus.

15. (original) The method of claim 14, wherein said streptococcus bacterium is a Streptococci Group A, B, F or G bacterium and said antigen is a group specific antigen.

16. (original) The method of claim 15, wherein said marker of at least one virus is a protein, nucleic acid and/or lipid marker.

17. (original) The method of claim 15, wherein said virus is selected from Rhinovirus virus, Parainfluenza virus, Influenza type A, B or C virus, Respiratory syncytial virus (RSV), Coronavirus, Adenovirus, Coxsackie A virus, Herpes simplex virus, Enterovirus, Epstein-Barr virus, Cytomegalovirus, or Papillomavirus.

18. (original) The method of claim 15, wherein said one or more additional markers include a marker of influenza A, a marker of influenza B and a marker of respiratory syncytial virus (RSV).

19. (original) The method of claim 14, wherein said sample is a nasal wash or a throat swab.

20. (original) The method of claims 14, wherein said extraction reagent further comprises a surfactant.

21. (original) The method of claim 14, wherein said antigen and said one or more additional markers are measured in said assay composition using a multiplexed assay format.

22. (original) The method of claim 21, wherein said multiplexed assay format is a multiplexed immunoassay format.

23. (original) The method of claim 21, wherein said measuring step comprises contacting said assay composition with a patterned array of immobilized antibodies.

24. (original) The method of claim 14, further comprising neutralizing the pH of said assay composition.

25. (original) A kit for measuring a plurality of different organism types in a sample comprising, in one or more containers: (a) an acid; (b) a nitrite salt; (c) a surfactant; (d) a first binding reagent that binds a first marker from a first of said plurality of different organism types and (e) a second binding reagent that binds a second marker from a second of said plurality of different organism types.

26. (original) The kit of claim 25, wherein said first and second binding reagents are antibodies.

27. (original) The kit of claim 25, wherein said first of said plurality of different organism types is a gram positive bacterium.

28. (original) The kit of claim 27, wherein said gram positive bacterium is a *Streptococci* or *Enterococci* bacterium and said first marker is a cell wall-associated antigen.

29. (original) The kit of claim 28, wherein said gram positive bacterium is a Streptococci Group A, B, F or G bacterium and said first marker is a group specific antigen.

30. (original) The kit of claim 27, wherein said second of said plurality of different organism types is selected from the group consisting of fungi, viruses and gram negative bacteria.

31. (original) The kit of claim 27, wherein said second marker is a protein, nucleic acid and/or lipid marker.

32. (original) The kit of claim 25, further comprising a solid support having a patterned array of antibodies immobilized thereon, said patterned array including a first region having said first binding reagent and a second region having said second binding reagent.

33. (original) The kit of claim 25, further comprising a base or pH buffer for neutralizing said acid.

34. (original) The kit of claim 25, wherein said nitrite salt and/or said acid is in a dry form.

35. (original) The kit of claim 25, wherein said nitrite salt and/or said acid is in solution.

36. (original) The kit of claim 25, wherein said nitrite salt and said acid are present in a combined form as nitrous acid.

Claims 37-56 (canceled)

57. (original) A method for measuring two or more markers comprising:
(a) contacting a sample containing one or more organisms with an extraction reagent comprising an oxidizing acid, thereby preparing an assay composition; and
(b) measuring said two or more markers within said assay composition.

58. (original) A method for measuring one or more markers comprising:
(a) contacting a sample containing one or more organisms with an extraction reagent comprising an oxidizing acid, thereby preparing an assay composition; and
(b) measuring said one or more markers in said assay composition, wherein at least one of said one or more markers includes a marker selected from the group consisting of protein, peptide, toxin, nucleic acid, and lipid.

59. (original) A method for measuring one or more markers comprising:

(a) contacting a sample containing one or more organisms with an extraction reagent comprising an oxidizing acid, thereby preparing an assay composition; and

(b) measuring said one or more markers in said assay composition, wherein at least one of said one or more markers is a viral marker or a fungal marker.

Claims 60-131 (canceled)